

PCX Info v10n2 September 2007

In January we claimed to be back by publishing the first magazine of 2007 filled with a lot of promises. However we didn't really kept them as you are reading the second issue right now while the end of the year is already in view. We organised a few meetings but on the other hand also cancelled June and moved August. In other words "There is room for improvement" and we will continue to do so in the coming months as complaining doesn't help us forward.

Below a recap of our improvement actions:

- **1.** We reinstall the club meetings with a frequency of 6 meetings a year.
- 2. We guarantee an upfront planning of at least 4 meetings of which we neither change the date nor the location.
- 3. We switch back to an English magazine until we find the resources to go for a mixed Dutch French magazine.
- **4.** The magazine will be mailed to anybody interested in it. On request we also provide a paper version of the magazine.
- 5. The new website, ready by the end of April, will be the centre for all our communication. It will also provide member & magazine registration.
- We will alternate the location of the meetings. Half of them will be near Brussels (Wezembeek-Oppem) while the others will be near Brugge (Oostkamp). You can find the addresses of both at the end of this magazine.
- 7. The member fee for 2007 is 5 Euro. This cost should cover the cost for the bi-monthly club meetings. As of today the fee isn't mandatory if you don't join any of the meetings, however we do count on some loyalty of our members if we deliver on our

- promises above. The PCX account number is **068-2009388-60**. More information will be provided through our new website for members living outside Belgium.
- 8. The new address of our website is www.petss.be/pcx as the old link though Ehsal is no longer working. We will move as soon as possible the old content to the new site.

Currently planned club meetings 2007.

- 22 September in Oostkamp
- 20 October in Wezembeek-Oppem
- 1 December in Oostkamp

On the agenda of next Saturday Philippe Roussel and Hubert de Mulder have 2 mathematical presentations, I have a the new HP35S with me and I also have a presentation with my findings of IFA 2007 the European Consumer Electronics fair which was held end of August in Berlin. Everybody is welcome to extend this agenda with extra presentations or input. The meeting is in Oostkamp. You can consult our web site (www.petss.be/pcx) for location details and a map. The HPCC conference is this year on 13 & 14 October in London.

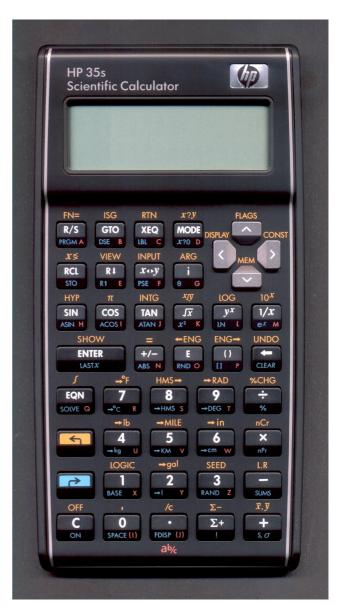
HP35s The name of the new HP35 lookalike. HP launched the calculator to celebrate the 35th anniversary of their original HP35, world's first handheld scientific calculator. We will have the new beauty with us next Saturday allowing all of you to benchmark it. Attached to this magazine some basic information of the new calculator. Next to the photos of the original HP35 and the new HP35s I added the photo through which initial info of the machine "accidentally" leaked;-)

That's the end of this magazine. I hope to see some of you by the end of the week in Oostkamp. If you have any questions or remarks you can always mail the PCX team through pcx.team@petss.be or give me a ring on 050 82 79 79 after 19u00.

Next PCX Club meeting 22 September at 14h00 "Nieuwyliet"

Lieven Gevaertplein 4 8020 Oostkamp



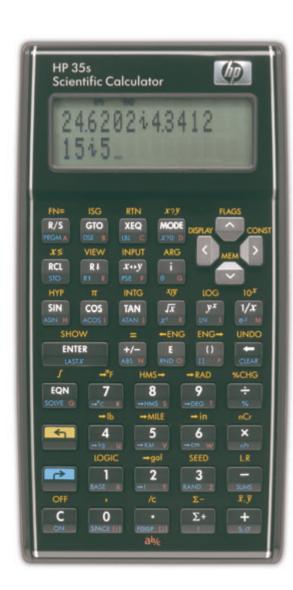




HP 35s Scientific Calculator



Get professional performance from the ultimate RPN scientific programmable calculator. Switch between RPN* and algebraic entry-system logic at any time. The HP 35s features a two-line display, and the powerful HP Solve** application.



Ultimate pocket size performer

Professionals and college students have the flexibility no other scientific calculator can offer with the choice of RPN or algebraic entry-system logic.

- Choose between RPN or algebraic entry-system logic—no other scientific calculator offers both
- Completely programmable—work more efficiently with keystroke programming
- Handle the heaviest workloads with ease using 30 KB of memory plus 800+ independent storage registers
- Store an equation then use again to solve any variable using HP Solve or use 100 built-in functions

Reliable performance and accurate results

The HP 35s delivers with a large 2-line alpha numeric display with adjustable contrast, raised edges to protect the keys, and a robust library of built-in functions and constants.

- Large 2-line display with adjustable contrast to easily view entries, results, menus and prompts
- Simplify physics with 42 built-in physical constants, plus a complete library of unit conversions
- · Get accurate results with edit, undo, delete capability
- Enjoy a compact size and protective raised edges that are designed for the mobile professional

Power and functionality in one

Save time with an impressive array of programmable scientific functions.

- Use strong statistics functions for single and two-variable statistics, linear regression and more
- Use base-n functions for binary, octal, decimal and hexadecimal number calculation and conversion
- Perform operations on complex numbers, calculate logarithms, exponentials, inverse functions and more
- Take advantage of a powerful fraction mode plus fraction-to-decimal conversion

HP quality and support

Have confidence that every time you turn on your HP calculator, every calculation you make, results in dependable, worry-free performance and accurate results.

- Rely on HP quality and award-wining support online and by phone
- Get the most from your calculator, visit www.hp.com/calculators for downloads, tutorials and more

HP 35s

Specifications





- The choice of both efficient RPN and algebraic entry-system logic
- Programmable with keystroke programming
- HP Solve application
- 30KB memory with 800+ independent storage registers
- 42 built-in physical constants

- Adjustable contrast 2-line display with menus, prompts and messages
- Edit, undo, delete capability
- Enhanced fractions mode, statistics and mathematics packages with base-n function
- Durable design with raised edges to protect the keyboard and premium carrying case



HP Part Number	F2215A
Display size	2 lines x 14 characters + indicators
Display Type	LCD
LCD	14 character dot matrix (5 x 7) x 2 lines + indicators
Contrast	Adjustable
Entry-system logic	RPN & Algebraic
Built-in functions	100+
Menus, prompts, etc.	Yes
Internal precision	15 digits
Pending operations	13-level parenthesis or maximum number of pending operation:13 @ALG
Memory	800+ Memory registers; 30KB
Keyboard	Alphanumeric
Power	2 x CR2032 batteries
Power off memory protection	Yes
Battery life	0.73 year @ 1 hr/day (approximately 9 months)
Weight	125 g (4.4 oz)
Size (L x W x D)	15.8 x 8.2 x 1.82 cm (6.22 x 3.23 x 0.72 in)
Enclosure material	Plastic, metal faceplate
Key top material	Plastic
What's in the box	Calculator, batteries, user manual, premium protective case
Warranty	1-year warranty (may vary by region)
Subject suitability	Engineering, Surveying, Science, Medicine
Permitted for use on	SAT® Reasoning and SAT® Subject Tests™ in Math 1 & 2, ACT, PSAT/NMSQT, AP Chemistry/Physics, PLAN, EXPLORE†

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^{*}Reverse Polish Notation (RPN) is an efficient data-entry system that can significantly reduce keystrokes. More information is available at www.hp.go.com/go/rpn

^{**}HP Solve is a time-saving application that allows you to solve for any variable without rewriting your equation.



Retro HP 35s Launched to Commemorate 35th Anniversary of First HP Handheld Calculator

Video contest winners also announced

PALO ALTO, Calif., July 12, 2007 – HP today unveiled the retro HP 35s Scientific Calculator in commemoration of the original HP-35, the world's first handheld scientific calculator launched 35 years ago.

As part of its year-long 35th anniversary celebration of the company's entry in the handheld calculator business, HP also named the winners of its nationwide calculator video contest.

The HP 35s pays tribute to its revered lineage with a classic design that is reminiscent of the original HP-35, including protective raised edges so that the calculator rests nicely in the palm of one's hand.

The new calculator is also HP's most advanced scientific programmable calculator, featuring ample memory for keystroke programming, equation solving and more than 800 storage registers; 100 built-in functions; and a large, two-line display with adjustable contrast to easily view entries.

For greater flexibility, the HP 35s allows users to easily switch between Reverse Polish Notation (RPN), HP's exclusive time-saving input mode, and the traditional algebraic mode. In addition, the HP 35s comes with a premium zippered protective pouch.

"With the HP 35s, HP honors the legendary HP-35 scientific calculator, which revolutionized the way engineers and scientists worked and marked the birth of HP's innovative heritage in the handheld calculator market," said Sam Kim, acting general manager, Calculator Division, Personal Systems Group, HP. "And today's winning contest videos help share this HP story, showing the new online generation how HP calculators touch people's lives."

"HP Calculator Casting Call" winners

The "HP Calculator Casting Call" winners were announced at the HP Golden Calculator Awards, a stylish event held at the Hollywood Roosevelt Hotel, home of the original Academy Awards ceremony. The video contest invited entrants to share their personal HP calculator experiences, and entries were judged based on the categories of Best Actor, Best Actress, Best Screenplay and Best Technical Film.

Celebrity guest Sean Gullette, star of the award-winning movie "pi", presented the Voters' Choice award. The Voters' Choice winner won a HP 50-inch High-Definition Plasma TV.

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Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304 www.hp.com The winners were:

- Best Actor: Gerry Ouellete, "Confessions of a Rocket Scientist"
- Best Actress: Actress in Robert Wiest's video, "Calculator Man"
- Best Screenplay: Chuck Innocenzi, "Success Breeds Success"
- Best Technical Film: Jamie Coy, "20 Questions with your HP 12c"
- Voters' Choice: Robert Wiest, "Calculator Man"

The winning videos and more information on HP's 35-year history in the handheld calculator market are available to view and read at www.hp.com/go/35celebration.

HP Calculators today

In the tradition of the HP-35 scientific calculator that rendered the slide rule virtually obsolete, HP offers a complete line of market-leading financial, graphing and scientific calculators. The company's high-end graphing calculators offer more connectivity options and greater configurability than other calculators in their class, and the HP12c Financial Calculator has become an industry standard in the business and finance community with more than 15 million units sold to date.

Information about HP's calculator line, as well as on-demand training videos, computer-based training and step-by-step learning modules for each of HP's current calculators, is available at www.hp.com/calculators.

Availability and pricing

The HP 35s Scientific Calculator is expected be available in late summer for a suggested retail price of \$59.99⁽¹⁾ at www.hp.com and select retailers and bookstores across the United States. A complete list of resellers is available at www.hp.com/calculators/resellers.

More information on the HP 35s and other HP mobility solutions is available in an online press kit at www.hp.com/go/Mobility2007.

About HP

HP focuses on simplifying technology experiences for all of its customers – from individual consumers to the largest businesses. With a portfolio that spans printing, personal computing, software, services and IT infrastructure, HP is among the world's largest IT companies, with revenue totaling \$97.1 billion for the four fiscal quarters ended April 30, 2007. More information about HP (NYSE: HPQ) is available at www.hp.com.

Note to editors: More news from HP, including links to RSS feeds, is available at www.hp.com/hpinfo/newsroom/.

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⁽¹⁾ Estimated U.S. retail prices. Actual prices may vary.

limited to HP's Annual Report on Form 10-K for the fiscal year ended Oct. 31, 2006. HP assumes no obligation and does not intend to update these forward-looking statements.

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HP Celebrates 35 Years of Handheld Calculator Innovation

In the early 1970s the slide rule was still standard fare and the personal computer was a vision of the future. Then, in 1972, HP introduced the world's first scientific pocket calculator – the HP-35 – and delivered portable "computing power" into the hands of users. An instant hit among scientists and engineers, the HP-35 soon displaced many a slide rule and marked the birthplace of HP's innovative and successful heritage in the handheld calculator market.

Mandate from the top

In 1970, an all-electronic handheld calculator caught the attention of Bill Hewlett, co-founder of HP. This 1.8-pound device was designed to compete with simple mechanical adding machines with its ability to add, subtract, multiply and divide. Hewlett was convinced HP could do better.

Hewlett's goal was to shrink down HP's first electronic desktop calculator – the 40-pound HP 9100A – into a lightweight, yet powerful device that could be easily carried around. He personally challenged HP engineers to develop a scientific calculator that was small enough to tuck into a shirt pocket.

Development was quick and intense. Just one year after Hewlett's encounter with the basic handheld calculator, HP brought the pocket-sized HP-35 to market. Quickly dubbed the "electronic slide rule," it could perform trigonometric, logarithmic and exponential functions – the essential tools of technical professions and the primary calculations performed on slide rules.

Part of the HP-35's technical achievement was its innovative and efficient data input method called Reverse Polish Notation (RPN). With RPN, the HP-35 required fewer keystrokes and was able to handle larger and more complex problems with less memory than other calculators. Still today, RPN is a much-beloved feature and industry differentiator across HP's line of scientific, graphing and financial calculators.

Weighing in at only 9 oz, the HP-35 stood apart from its elementary predecessors in portability and computing power. Although marketing experts declared there was no future for a handheld scientific calculator that cost \$400 when a slide rule cost \$20, more than 100,000 HP-35s were sold in the first year, and it went on to become one of the most successful products in HP's history. In 2000, Forbes ASAP named it as one of the 20 "all time products" that have changed the world.

HP's commitment to innovation

Hewlett envisioned HP as a preeminent innovator in calculator technology and the leading developer of high-performance, high-quality programmable calculators for the business and scientific marketplace. This commitment to quality, reliability and

Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304 www.hp.com innovation helped cement HP as a leader in the history of the handheld calculators.

When the HP-35 was introduced, there were 75 handheld calculators on the market from more than 20 manufacturers. All of these were four-function calculators and could only add, subtract, multiply and divide. From 1972 to 1976, four-function calculator prices fell 95 percent – plummeting from an average of \$195 to just \$9.95. Falling prices unseated a number of calculator brands.

When the consumer calculator market went through a shakeout in 1978 and 1979, HP had already built a strong position in the professional calculator market segment. That position was based on innovative products such as the HP-35 scientific calculator; the HP-80, the first pocket-sized business calculator; the HP-65, the first programmable handheld calculator and the HP-25C, the first handheld calculator with non-volatile memory.

During that time period, HP had also developed the unique HP-01 wrist instrument. More than the sum of its parts, the HP-01 combined a wristwatch and a calculator, but in a way that the device could do things that neither could do alone. For instance, a user could calculate a real time display of money spent or made by multiplying the stopwatch by a rate of spending.

HP went on to develop advanced handheld calculators such as the HP-41C – the first programmable, alphanumeric handheld. According to the Smithsonian National Air and Space Museum, on a total of nine Shuttle missions, astronaut Sally Ride and several other astronauts used the HP-41C. Loaded with a variety of specialized software programs at a very low cost, the HP-41C gave the astronauts more computing power than a custom-made device produced specifically for a given space mission.

Across the line, HP calculators are known for their legendary reliability and durability. Innovatively constructed to withstand everyday drops and bumps, HP's calculators often survive the most unusual of circumstances, like the following customer story reported in a 1977 edition of HP Digest:

"Last night while backing my wife's 73 Ford Gran Torino, I opened the door for a better look back, and my HP-25 in the carrying case fell out of my pocket without my knowing it. Seeing that I needed to pull up and move over, I did and backed up again. This time I heard a thump. Sure enough it was my HP-25. I had run over it with the front wheel against frozen gravel. I was sure it was smashed flat but it was not hurt at all."

Focus on design

The HP-35's industrial design was unique in its day as it was created around user needs rather than simply designed around the latest technology: the "pocket-sized" specification was the guiding mandate of the design. Based on this foundation, a number of HP calculators continue to be standouts in industrial design.

In the late 1970s, HP introduced the HP-92 desktop printing financial calculator and HP-38 financial calculator whose ground-breaking top row key design helped lead to HP's lasting success in the financial calculator market. HP recognized the need for users to easily solve for a fifth unknown variable in basic financial calculations and designed new top row keys to answer this real-life challenge. As a result of this innovative key design, which dramatically expanded functionality and ease of use, the HP-92 and HP-38 became the forefathers of HP's very successful line of financial calculators.

Echoing the HP-35's history, HP engineers were charged with creating a finance



calculator that would fit conveniently in a shirt pocket, be reliable and have a long battery life. The design team decided to lay out the calculator in a horizontal position. This was partly to accommodate all the keys in a small form factor and because many commonly used adding machines were also oriented horizontally. The result was the HP-12C Programmable Financial Calculator, which is instantly recognized for its unique horizontal layout still today.

In addition, during the final stages of development, the design team was not happy with the 12C's battery life for usability reasons. The solution was to add a third battery in series, which would require an entire re-design of the chip layout and the case to accommodate this change. As a result, the upper back of the case was thickened just enough to allow the extra battery. Not only did this increase the "worst case" battery life up to six months, but the case's tilt made it easier to read and use when lying on a desk. Now an iconic consumer electronics product, the HP-12C that's sold today acts and looks just like it did when it made its worldwide debut over 25 years ago.

Last year, HP introduced the stylish HP 39gs graphing calculator, targeted for high school classrooms. In addition to its ease-of-use and reliability features, the HP 39gs sports a modern white and gray look and clean lines to appeal to its design-conscious teenage audience. Looking to the future, customers can expect HP calculators to continue to be on the forefront of user-centric design.

HP calculators today

Having spurred the leap from slide rules to handheld scientific calculators, HP continues its 35-year heritage of delivering innovative products, offering a complete line of market-leading financial, graphing and scientific calculators. Today its high-end graphing calculators offer more connectivity options and greater configurability than other calculators in their class, and the HP-12C Financial Calculator has become an industry standard in the business and finance community with more than 15 million units sold to date.

According to the NPD Group:

- HP Financial Calculators are rated No. 1 in U.S. dollar share sales;
- The HP 33s Scientific Calculator is rated the "Best Seller" in the Scientific Programmable Calculator category in both units and dollar share;
- All four HP Financial Calculators (10bII, 12c, 12c Platinum, 17bII+) are top ten "Best Sellers" in the Financial Calculator category in both units and dollar share.

Rooted in a challenge personally set forth by HP co-founder Bill Hewlett, HP handheld calculators are a cornerstone of HP's history of innovation. Following Hewlett's commitment to calculator innovation, HP will continue to shape the landscape of calculator technology in the future.



TIMELINE OF BREAKTHROUGH HP HANDHELD CALCULATORS

1972 HP-35: World's first handheld scientific calculator
The HP-35 virtually made the engineer's slide rule obsolete. It was HP's first
product containing both integrated circuits and LEDs (light-emitting diodes).
Both technologies had been developed in HP Labs.



- 1973 HP-80: World's first pocket-sized business calculator
 Popular among bankers, investment analysts and real-estate professionals, the
 HP-80 eliminated the need for financial tables used to compute compound
 interest, annuities and bond yields. It could also perform complex statistical
 operations, such as linear-regression analysis and standard deviation.
- 1974 HP-65: World's first programmable pocket calculator
 The HP-65's keystroke programmability later led some to deem it the world's
 first handheld computer. Calculator programs were recorded on small magnetic
 cards, which then could be re-entered into the calculator and run again.
- 1976 HP-25C: World's first handheld calculator with non-volatile program memory

The calculator's continuous memory could retain programs and data no matter how often it was switched on and off.

1977 HP-01 Wrist Instrument

Combination digital wristwatch, calculator and personal calendar. Performed more than three-dozen functions to manipulate and interrelate time, calendar and numeric data. It demonstrated HP's excellence at miniaturization.



1979 HP-41C: World's first programmable, alphanumeric handheld calculator

Capable of displaying numbers, letters and common symbols, it became the heart of the first calculator/peripheral system. Owners could purchase a number of peripherals, including a magnetic-card reader, a thermal printer/plotter, a barcode reading wand or other accessories. Much like a computer, the HP-41C could prompt users with phrases such as "Annual Interest Rate = ?" and then could label answers with phrases such as "I

1981 HP-12C: HP's longest and best-selling calculator, 1981
The HP-12C sold today acts and looks just as it did when first introduced in 1981, with the exception of improved performance due to modern components. Valued for its reliability, proven accuracy and long battery life, the HP-12C has become an industry standard in the business and finance community.



1982 HP Interface Loop (HP-IL), first system to allow handhelds to communicate with

computers

The HP-IL provided data input/output for battery-operated devices. For example, the loop allowed a salesperson or scientist to gather information in the field using a handheld calculator, then transfer the data to a PC.

1986 HP-18C: First calculator with HP Solve

HP Solve is an HP calculator differentiator that lets users solve an equation for any variable without rewriting the equation. The HP-18C was also the first calculator with infrared printing and with menu-driven soft keys for better usability.



1987 HP-28C: First full RPL calculator

In the late 1980s, HP developed a new programming language for its new series of extremely powerful calculators. By combing elements of RPN, Lisp and Forth, HP came up with a language called RPL (or ROM-based Procedural Language).

1989 HP-48SX

First handheld calculator with two-way infrared communication.





1991 HP 95LX Palmtop computer

Largely leveraging HP's calculator technology, the HP 95LX had as much computing power as a desktop PC and able to run many standard DOS programs on it. It had a financial calculator, telephone number/address program, simple text editor and infrared link for transferring data. Widely considered HP's first PDA (personal digital assistant), it was the first palmtop PC with built-in Lotus 1-2-3.



1993 HP 48gx

Sophisticated scientific-graphics calculator featuring 3D plotting and other advanced built-in features not previously found in calculators.



1999 HP 30s

A scientific algebraic calculator featuring an interchangeable keypad overlay so users could change the calculator's color.



2003 HP 12c Platinum

Plat

boasts increased memory to allow for more keystroke programming steps and offers more built-in functions, including the option of standard algebraic mode as well as Reverse Polish Notation mode.



2003 HP 49g+

First handheld calculator to offer expansion via SD cards.

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